Introduction to the Information Technology in Healthcare Track

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The Information Technology in Healthcare track at HICSS serves as a forum at which healthcare, computer science, and information systems professionals can come together to discuss issues related to the application of information technology in healthcare. While the medical, technical, and managerial perspectives each contributes to particular aspects of the health care problems, the complexity of today’s problems requires more than one perspective. As a unique opportunity for cross-disciplinary interaction, we hope this track will give our conference participants and the readers of these proceedings new insights into the problems they face.

This year we have six minitracks continuing from past conferences, several of which have been refocused to better address contemporary issues. We are also very pleased to have a new minitrack: “Learning Health Systems, Big Data and Socio-Technical Change.”

Accordingly, this year the track consists of the following seven minitracks:

- Evidence-Based Design and Analysis for Mobile and Web Health
- Global Health IT Strategies
- HCI and Consumer Health Informatics
- IT Adoption, Diffusion and Evaluation in Healthcare
- IT Architecture and Application in Healthcare Environments
- Learning Health Systems, Big Data and Socio-Technical Change
- Mobile and Sensing Health Promotion and Maintenance

The minitrack coordinators provide brief summaries of their minitracks and overviews of the papers in their sessions.

With 49 papers, the track maintains its growth last year. Papers in the minitracks address a wide range of clinical, managerial, technical issues, social, and policy issues, and report on studies from around the world. An increasing number of papers look at issues around data analytics and the use of IT as a tool for health intervention. Technology adoption and diffusion are investigated at the physician, patient, clinic, hospital, and national levels. The application of a variety of mobile, data analysis, and systems integration technologies are investigated in the areas ranging from public health to behavioral medicine. Most all of the papers discuss managerial or health policies implications.

IT in healthcare is truly a global issue; the growth in international participation in our track reflects this trend. This year, we are fortunate to have researchers from around the world contributing to our track. Researchers from outside the United States account for 37% of the papers in the track and come from 8 different countries.

Despite the diversity of topics and countries represented in this track, all of the papers have a common focus: How can information technology be use to improve the quality of care, the efficiency of the delivery of healthcare, and the access to healthcare?

We are particular excited to have, as part of the track, a special day and a half long symposium on learning health systems. The goal of the symposium is to refine and address key research questions and begin laying the foundations for establishing the science of cyber-social ecosystems. The results of the symposium will be reported in white paper separate from these proceedings and made available on the HICSS website.

We wish to thank all of the people who have worked so diligently to develop this track; we appreciate the time and effort the minitrack coordinators had to spend over the past year. The high quality collection of papers in the track is the fruit of their efforts. We look forward to the further development of this track. We welcome, and strongly solicit, your participation in this track at future HICSS conferences. Please contact us with your ideas for new minitracks or papers.

We hope you find the proceedings useful and enjoyable.